

ABSTRACT

**ELECTRONICS INTERFACE FOR AN ULTRASOUND CONSOLE**

Systems and methods for interfacing an Optical Coherence Domain

- Reflectometry (OCDR) system to an ultrasound console are provided. A first electronics  
5 interface embodiment processes parallel channel outputs of the OCDR system into a serial analog signal for input to an ultrasound console. Another electronics interface embodiment processes the parallel channel outputs of the OCDR system into a digital data sequence for input to an ultrasound console having a digital input. Yet another electronics interface embodiment processes a multiplexed output from a multiplexed  
10 photo array into an analog or digital form for input to an ultrasound console. Still another electronics interface embodiment processes a plurality of multiplexed outputs from a multiplexed photo array into an analog or digital form for input to an ultrasound console.